(FILE 'HOME' ENTERED AT 16:30:18 ON 14 MAY 2002)

FILE 'CAPLUS' ENTERED AT 16:30:27 ON 14 MAY 2002

L1	7222	S	(POLYETHYLENE? (5A) MOLD?)
L2	464	S	L1 AND (POLYETHYLENE (5A) POWDER?)
L3	22	S	L2 AND (PIGMENT? OR COLORANT?)
L4	0	S	L3 AND COAT?
L5	22	S	L3
L6	22	FOCUS	L5 1-

=>

L6 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1996:521537 CAPLUS
DN 125:170033
TI Effects of **pigmentation** on the impact strength of rotationally **molded polyethylene**
AU Crawford, R. J.; Spence, A. G.; Silva, C.
CS Dept. Mech. Eng., Queen's University, Belfast, UK
SO Annual Technical Conference - Society of Plastics Engineers (1996), 54th(Vol. 3), 3253-3258
CODEN: ACPED4; ISSN: 0272-5223
PB Society of Plastics Engineers
DT Journal
LA English
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 37
AB Compounding of the **pigment** into the **polyethylene** before grinding to a **powder** for rotational molding gives a much more consistent color and better mech. properties, but it is expensive and restricts flexibility in regard to material purchases. This paper describes the results of an exptl. program to quantify the impact strength of rotationally **molded polyethylene** as a function of three different **pigmentation** methods - dry mixing, turbo-blending and compounding. Different additive levels of a wide range of **pigments** were used and the results show that the processing window is much broader than was previously believed. This is important practical information for the molder because these effects have never been quantified before. Another important outcome of the work is that it is shown that it is not possible to generalize in regard to the effects of **pigments**. While impact strength can be retained across a broad range of parameters for some colors, this is not true for other colors.
ST impact strength **molded polyethylene** **pigmentation**; rotationally **molded polyethylene** impact **pigmentation**
IT 9002-88-4, Polyethylene
RL: PRP (Properties)
(effects of **pigmentation** on impact strength of rotationally **molded polyethylene**)
RN 9002-88-4

L6 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1973:98573 CAPLUS
DN 78:98573
TI Rotational **molding** of **polyethylene powders**
AU Tomo, Daniel
CS Polym. Serv. Lab., U. S. Ind. Chem. Co., Tuscola, Ill., USA
SO Basic Princ. Rotational Molding (1971), 163-90. Editor(s): Bruins, Paul F. Publisher: Gordon and Breach, New York, N. Y.
CODEN: 26HPAI
DT Conference; General Review
LA English
CC 37-0 (Plastics Fabrication and Uses)
AB A review without refs.; subjects covered were methods of producing and classifying **polyethylene** [9002-88-4] **powders**, **pigments** and additives, mol. properties, rotomolding techniques, and recent developments and applications.
ST review rotomolding polyethylene
IT Molding of plastics and rubbers
(rotational, of polyethylene)
IT 9002-88-4
RL: PROC (Process)

(molding of, rotational)
RN 9002-88-4

L6 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1983:161764 CAPLUS
DN 98:161764
TI Colored **polyethylene** for **powder molding**
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC C08L023-04; C08J003-20; C09D005-00
CC 37-6 (Plastics Manufacture and Processing)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 57174328	A2	19821027	JP 1981-59695	19810422

AB The title colored polyethylene (I) [9002-88-4] was prepd. by blending suspension-polymd. I powder (with rough particle surface) with 0.05-1.0 phr **pigment** and 0.03-3.0 phr org. compd. (m.p. 30-110.degree.) as mixing aid at a temp. lower than the I m.p. For example, suspension-polymd. I powder (d. 0.940 g/cm3) was mixed with 0.3 phr TiO2 and 0.1 phr stearamide [124-26-5] (m.p. 100-50) and molded in a biaxial rotation molding machine to give a 3-mm-thick hollow molding specimen having better **pigment** dispersion, inner surface smoothness, and **pigment** fall-off resistance, and higher elongation at break (500 vs. 100%) than a control prepd. without stearamide.
ST coloring polyethylene mixing aid; stearamide coloring polyethylene titanium chloride
IT Carbon black, uses and miscellaneous
RL: USES (Uses)
(coloring by, of polyethylene, mixing aids for)
IT Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous
RL: USES (Uses)
(mixing aids, for coloring polyethylene)
IT Coloring
(of polyethylene, mixing aids for)
IT Alkanes, uses and miscellaneous
RL: USES (Uses)
(iso-, mixing aids, for coloring polyethylene)
IT 147-14-8 1306-23-6, uses and miscellaneous 1309-37-1, uses and miscellaneous 57455-37-5
RL: USES (Uses)
(coloring by, of polyethylene, mixing aids for)
IT 9002-88-4
RL: USES (Uses)
(coloring of, mixing aids for)
IT 57-11-4, uses and miscellaneous 106-14-9 112-84-5 112-85-6 112-92-5 124-26-5 139-44-6 301-02-0 1338-41-6 36653-82-4 37220-84-1
RL: USES (Uses)
(mixing aid, for coloring polyethylene)
RN 147-14-8
RN 1306-23-6
RN 1309-37-1
RN 57455-37-5
RN 9002-88-4
RN 57-11-4
RN 106-14-9
RN 112-84-5
RN 112-85-6

RN 112-92-5
RN 124-26-5
RN 139-44-6
RN 301-02-0
RN 1338-41-6
RN 36653-82-4
RN 37220-84-1

L6 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1989:596814 CAPLUS
DN 111:196814
TI Simultaneous printing and rotational **molding** of **polyethylene**
IN Kazuma, Yasuo
PA Sanyo Electric Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM B41M003-06
ICS B29C041-04
CC 42-2 (Coatings, Inks, and Related Products)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01133777	A2	19890525	JP 1987-291793	19871120

AB A molding is printed with good adhesion by a process which includes attaching a printing mold having a thermosetting ink layer to the holes corresponding to the area to be printed on a mold, feeding a polymer in the mold, and rotational molding. A **polyethylene** **molding** was printed with a thermosetting ink contg. **pigments** and **powd. polyethylene**.
ST printing rotational **molding** **polyethylene**
IT Printing, nonimpact
(rotational **molding** and, of **polyethylene**, simultaneous)
IT Molding of plastics and rubbers
(rotational, simultaneous printing and, of polyethylene)
IT 9002-88-4, **Polyethylene**
RL: USES (Uses)
(rotational **molding** and simultaneous printing of)
RN 9002-88-4

L6 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1996:598820 CAPLUS
DN 125:223837
TI Continuous process for manufacture of high-strength and high-modulus polyethylene articles having additional properties
IN Yoshida, Sumio; Komazawa, Takashi; Kurihara, Kazuhiko; Yazawa, Hiroshi
PA Nippon Oil Co Ltd, Japan; Kobunshi Kako Kenkyusho
SO Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM B29C069-00
ICS B29C043-30; B29C055-02; B29C055-18; B32B027-18; B32B027-20
ICI B29K023-00, B29K101-12, B29L009-00
CC 38-2 (Plastics Fabrication and Uses)
Section cross-reference(s): 40
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI JP 08174682 A2 19960709 JP 1994-324312 19941227

AB The articles such as films, sheets or slit and tape yarns are manufd. by compressive **molding** an ultrahigh-mol.-wt. **polyethylene** resin **powder** having the limiting viscosity at 135.degree. in Decalin of 5-50 dL/g , rolling and stretching the resulting sheet and further slitting if yarn prodn. is intended where the modification of article appearance (e.g. color) or improvement of their properties, e.g., antistatic and heat-, light- and weather-resistant, is done easily by continuously molding the resin powder using a compressive rolling app., e.g. chain roller, at a temp. lower than the m.p. of the resin, then laminating the resin online with a powder or film of a thermoplastic resin contg. modifiers such as **colorants**, antistatic agents, wetting agents, stabilizers, tackifiers, etc. The process overcomes the difficulty of manuf. of high-modulus and high-strength polyethylene films, sheets or yarns with secondary appearance and properties other than that of original polymer without loss of its strength properties.

ST high modulus polyethylene film processing; strength polyethylene film processing; continuous compressive **molding polyethylene** ; antistatic high modulus **polyethylene molding**; color high modulus **polyethylene molding**; light resistant high modulus **polyethylene molding**; heat resistant high modulus **polyethylene molding**; weather resistant high modulus **polyethylene molding**

IT Coloring materials
Dyes
Pigments
(continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT Plastics, film
Plastics, laminated
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT Antistatic agents
Heat stabilizers
Light stabilizers
Wetting agents
(in continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT Carbon black, uses
RL: MOA (Modifier or additive use); USES (Uses)
(in continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT Polyolefin fibers
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(ethylene, slit or tape yarns; continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT Glycerides, uses
RL: MOA (Modifier or additive use); USES (Uses)
(mono-, antistatic agents; continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT Plastics
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES

(Uses)
(thermo-, continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT 10213-78-2, Stearyldiethanolamine
RL: MOA (Modifier or additive use); USES (Uses)
(antistatic agents; in continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT 9002-88-4, Polyethylene
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT 9002-89-5, Poly(vinyl alcohol) 9012-76-4, Chitosan
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(hydrophilic improvers; in continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT 79-10-7, Acrylic acid, uses
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
(hydrophilic improvers; in continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

IT 70198-29-7, Tinuvin 622 73754-27-5, Sanol LS2626
RL: MOA (Modifier or additive use); USES (Uses)
(light stabilizers; in continuous process for manuf. of and imparting secondary properties to high-strength and high-modulus polyethylene films or sheets and slit yarns)

RN 10213-78-2
RN 9002-88-4
RN 9002-89-5
RN 9012-76-4
RN 79-10-7
RN 70198-29-7
RN 73754-27-5

L6 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1997:590543 CAPLUS
DN 127:248930
TI Color master batch compositions for propylene-.alpha.-olefin block copolymer moldings and their compounds
IN Kuroda, Kazuhisa; Nagamori, Shunsuke; Taniguchi, Yoichi; Hamada, Sumio
PA Sumika Color K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L023-10
ICS C08L023-04; C08L053-00
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 41

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09227734	A2	19970902	JP 1996-38489	19960226

PI JP 09227734 A2 19970902 JP 1996-38489 19960226

AB Title compns. giving moldings with good impact strength, rigidity, and no silver or black streak contain color master batch comprising propylene (I) polymers 15-94, **powd.** ultrahigh mol. wt. **polyethylene**

2-20, **pigments** 3-50, and **pigments** dispersants 1-15%. Compds. comprising 100 parts I-.alpha.-olefin block copolymers and 0.1-5 parts said **polyethylene**, and **moldings** obtained by injection **molding** mixts. comprising 100 parts said I polymers and 1-20 parts master batch compns. are also claimed. Thus, 7.2:92.8 ethylene-propylene block copolymer 100, Mipelon XM 221U (**powd**. ultrahigh mol. wt. **polyethylene**) 0.5, N-(aminoethyl)-3-aminopropyltrimethoxysilane 0.2, 78:22 ethylene-propylene random copolymer rubber 10, talc 20, 4/6 furnace carbon black/Ca stearate mixt. 2.0, tetrakis[methylene-3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]methane 0.1, bis(2,4-di-tert-butylphenyl)pentaerythritol diphosphite 0.05, and dimyristylthio dipropionate 0.03 part were melt kneaded and pelletized to give a compn. with uniform color.

ST color master batch propylene polymer; alpha olefin copolymer color master batch; **powd** ultrahigh mol wt **polyethylene**; injection molding color master batch; impact resistance molding color master batch; rigidity molding color master batch; silver streak prevention color master batch

IT Injection molding of polymeric materials
Pigments (nonbiological)
(color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

IT Polymer blends
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

IT Ethylene-propylene rubber
RL: MOA (Modifier or additive use); USES (Uses)
(in color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**pigments**; color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

IT Coupling agents
(silane; in color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

IT 106565-43-9, Ethylene-propylene block copolymer
RL: POF (Polymer in formulation); USES (Uses)
(color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

IT 1760-24-3, N-Aminoethyl-3-aminopropyltrimethoxysilane
RL: MOA (Modifier or additive use); USES (Uses)
(couplers; in color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

IT 9010-79-1
RL: MOA (Modifier or additive use); USES (Uses)
(ethylene-propylene rubber, in color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

IT 14807-96-6, Talc, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fillers; in color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

IT 9002-88-4, Mipelon XM 221U
RL: MOA (Modifier or additive use); USES (Uses)
(ultrahigh-mol.-wt.; in color master batch for propylene-.alpha.-olefin copolymer-based injection moldings)

RN 106565-43-9
RN 1760-24-3
RN 9010-79-1
RN 14807-96-6

RN 9002-88-4

L6 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1997:735935 CAPLUS
DN 127:359525
TI Colored poly(ethylene terephthalate) molded articles, coloring compositions therefor and manufacture thereof
IN Phillips, Tracy L.; Harris, Ronald M.; Burgess, Alan R.; Johnston, Judy A.
PA M.A. Hanna Co., USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM C08K005-09
ICS C08J003-20
NCL 524275000
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5686515	A	19971111	US 1995-557685	19951113

PI US 5686515 A 19971111 US 1995-557685 19951113

AB Title molded articles are prepd. by molding a compn. contg. a polyolefin wax dispersant, an ethylene copolymer, a **colorant**, and PET melt. Preferably, the wax dispersant is a maleated polyethylene wax, but can also be a low mol. wt. polyethylene wax and the compn. further includes linear, low-d. polyethylene. A preferred ethylene copolymer is ethylene-(meth)acrylic acid or ethylene-Me acrylate copolymer. Thus, a food-applicable **colorant** blend comprising **Pigment** White 6, **Pigment** Red 101 0.12, **Pigment** Yellow 180 0.42, **powd. polyethylene** wax 13.00, ethylene copolymer (EMAC) pellets 10.00, powd. LLDPE 8.30, B 225 stabilizer 0.25, and CaCO3 5.00% was melted in a counter-rotating twin-screw extruder (profile 100, 155, 155, 160, 160, 160.degree.), dispersed, extruded, cooled, pelletized, and injection molded (3%) with PET melt with back pressure 44 psi, giving good bottles having uniform color and slight screw slippage.

ST PET polyolefin wax ethylene copolymer coloring; bottle colored PET blend molding; **pigment** blending pelletizing uniform color PET

IT Polymer blends
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(PET-polyolefin wax-ethylene copolymer; colored PET molded articles, coloring compns. therefor and manuf. thereof)

IT Bottles
Molding of polymeric materials
(colored PET molded articles, coloring compns. therefor and manuf. thereof)

IT Linear low density **polyethylenes**
Polyesters, uses
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(colored PET **molded** articles, coloring compns. therefor and manuf. thereof)

IT Coloring materials
(**pigment** compns.; colored PET molded articles, coloring compns. therefor and manuf. thereof)

IT Dispersing agents
(polyolefin wax; colored PET molded articles, coloring compns. therefor and manuf. thereof)

IT Polyolefins
RL: PEP (Physical, engineering or chemical process); POF (Polymer in

formulation); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(wax; colored PET molded articles, coloring compns. therefor and manuf. thereof)

IT 9010-77-9, Ethylene-acrylic acid copolymer 25038-59-9, PET polymer, uses 25053-53-6, Ethylene-methacrylic acid copolymer 25103-74-6, Ethylene-methyl acrylate copolymer
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(colored PET molded articles, coloring compns. therefor and manuf. thereof)

IT 9002-88-4, **Polyethylene**
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(wax; colored PET **molded** articles, coloring compns. therefor and manuf. thereof)

RN 9010-77-9
RN 25038-59-9
RN 25053-53-6
RN 25103-74-6
RN 9002-88-4

L6 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1974:27936 CAPLUS
DN 80:27936
TI Improved treatment of **pigments**
PA Laporte Industries Ltd.
SO Fr. Demande, 17 pp. Addn. to Fr. 2,084,543, (See Ger. 2,111,990, CA 76;474729).
CODEN: FRXXBL
DT Patent
LA French
IC C09C; C09D; C08G
CC 36-6 (Plastics Manufacture and Processing)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2156867	A2	19730601	FR 1972-37230	19721020
	FR 2156867	B2	19770729		
	GB 1392189	A	19750430	GB 1971-49291	19721019
	BE 790419	A4	19730215	BE 1972-123373	19721020
PRAI	GB 1971-49291		19711022		
	BE 1971-764220		19710312		

AB The opacity and(or) brilliance, and dispersibility of **pigments** e.g. for plastics were improved on addn of 0.1-5% (based on **pigment** wt.) polycaprolactone (I) [24980-41-4] and optionally magnesium stearate (II) [557-04-0] and aluminum stearate (III) [637-12-7] lubricants to hydrated alumina [1344-28-1] mixts. with titanium dioxide [13463-67-7] or silica [7631-86-9]. Thus, rutile TiO2 contg. 1% Al2O3 (prepd. from an aq. TiO2-Al2(SO4)3 suspension neutralized with NaOH) was dispersed with Na2P4O7, mixed with CO2H-capped I (mol. wt. 15,000) at 80.deg., and II-III mixt. at 45.deg., cooled, Duomac T (tallow diamine diacetate) cationic surfactant added. The compn. was filtered to give a I-**pigment** fluid **powder** which was added to **polyethylene** [9002-88-4] and polystyrene [9003-53-6] **molding** compns. to give homogenous disk moldings contg. no aggregate **pigment**. In contrast, TiO2 contg. 0.6% polydimethylsiloxane was highly aggregated in similar moldings.

ST titania polycaprolactone **pigment** plastic; alumina polycaprolactone **pigment**; vinyl plastic **pigment**

IT Plastics
RL: USES (Uses)
(**pigments** for, with increased opacity and brilliance)
IT Polyesters, uses and miscellaneous
RL: USES (Uses)
(**pigments** treated with, for improved opacity and brilliance)
IT **Pigments**
(polycaprolactone treatment of, for improved opacity and brilliance)
IT 557-04-0 637-12-7
RL: USES (Uses)
(**pigments** treated with polycaprolactone and, for improved opacity and brilliance)
IT 24980-41-4 25248-42-4
RL: USES (Uses)
(**pigments** treated with, for improved opacity and brilliance)
RN 557-04-0
RN 637-12-7
RN 24980-41-4
RN 25248-42-4

L6 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1979:492420 CAPLUS
DN 91:92420
TI Study of methods for coloring polyethylene with fluorescent **pigments**
AU Sal'vitskaya, L. N.; Sviridova, L. A.; Kurgan, E. V.
CS USSR
SO Khim. Prom-st., Ser.: Proizvod. Pererab. Plastmass Sint. Smol (1979), (2), 29-32
CODEN: KPSSDO
DT Journal
LA Russian
CC 36-6 (Plastics Manufacture and Processing)
AB **Powdering** of **polyethylene** (I) [9002-88-4] granules with org. fluorescent **pigments**, followed by extrusion or molding gave uniformly tinted I shapes. The retention and distribution of 1% orange-yellow, orange, or green fluorescent **pigments** on I granules was improved by blending with 0.2% petroleum jelly. The **pigmentation** did not interfere with the processing of I.
ST polyethylene tinting fluorescent **pigment**; extrusion polyethylene fluorescent **pigment**; coloring polyethylene fluorescent **pigment**; **molding polyethylene** fluorescent **pigment**
IT Coloring
(of polyethylene, with org. fluorescent **pigments**, before extrusion or molding)
IT 9002-88-4
RL: PROC (Process)
(coloring of, with org. fluorescent **pigments**, before extrusion or molding)
RN 9002-88-4

L6 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1983:576856 CAPLUS
DN 99:176856
TI Phenolic resin moldings with decorative patterns
PA Matsushita Electric Works, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC C08L101-00; C08K009-04

CC 37-3 (Plastics Manufacture and Processing)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58063753	A2	19830415	JP 1981-163159	19811012

AB A thermosetting resin (e.g., phenolic resin) molding material contg. a colored (e.g., by **colorant**) 5-16-mesh thermoplastic resin (e.g., **polyethylene** [9002-88-4]) **powder** has improved processability and can give a fine appearance molding with decorative pattern (e.g., woodgrain).

ST **polyethylene powder** phenolic resin **molding**; molding material phenolic resin; decorative pattern phenolic molding material

IT Plastics, **molded**
RL: USES (Uses)
(phenolic resin-**polyethylene**, with decorative patterns)

IT 9003-35-4
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(**moldings**, colored **polyethylene powder** -contg., with decorative patterns)

IT 9002-88-4
RL: USES (Uses)
(powders, colored, phenolic resins contg., for moldings with decorative patterns)

RN 9003-35-4
RN 9002-88-4

L6 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1993:497631 CAPLUS
DN 119:97631
TI Moldable carbonaceous materials for products with high caloric value for safe and dirt-free incineration after multiple reuse
IN Nickel, Klaus Dietrich
PA Citadel Investments Ltd., UK
SO Ger. Offen., 13 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C04B035-52
ICS C08K003-04; C08L023-06; C08L023-12; C08J011-00
ICI C08K003-04, C08K007-00
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 51, 52, 59, 60
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4140025	A1	19930609	DE 1991-4140025	19911204
	DE 4140025	C2	19940630		
	CA 2101650	AA	19930605	CA 1992-2101650	19921126
	WO 9312169	A1	19930624	WO 1992-EP2724	19921126
	W: AU, BG, BR, CA, CS, FI, HU, JP, KR, NO, PL, RO, RU, US				
	RW: AT, BE, CH, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9230827	A1	19930719	AU 1992-30827	19921126
	AU 666898	B2	19960229		
	EP 571586	A1	19931201	EP 1992-924605	19921126
	R: AT, BE, CH, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
	JP 06505527	T2	19940623	JP 1992-510546	19921126
	PL 170735	B1	19970131	PL 1992-300205	19921126
	RU 2089566	C1	19970910	RU 1993-53626	19921126
	HU 76624	A2	19971028	HU 1993-2106	19921126
	CN 1076433	A	19930922	CN 1992-114941	19921204
	NO 9302776	A	19930803	NO 1993-2776	19930803

US 5726238 A 19980310 US 1996-622049 19960326
PRAI DE 1991-4140025 19911204
WO 1992-EP2724 19921126
US 1993-94195 19930802
US 1995-380224 19950127

AB The material consists of hydrocarbon thermoplastics in addn. to hazardous substance- and ash-free coal, coke or petroleum coke, comminuted at very high speed into very fine C powder. The material can be molded into plates, tubes, sheets, etc. with ordinary plastic molding equipment, e.g., an extruder, using the bonding energy released during the high-speed comminution, without addnl. additives. The resulting products have mech., phys., and processing properties comparable to those of known materials, can be reused without loss in quality, and have caloric value >37,000 kJ/kg so that energy is produced when they are finally incinerated; the incinerator is not fouled and there are no toxic substances released to the atm. The thermoplastics are preferably polyethylene and polypropylene. A product prepd. from 70 wt.% powd. ash- and S-free anthracite and 30 wt.% polyethylene had higher strength, E modulus, and softening temp. than polyethylene alone.

ST carbon powder thermoplastic polymer recycleable; **polyethylene** anthracite **powder molded** product; polypropylene thermoplastic carbon powder; petroleum coke powder molded product; reusable molded product caloric energy; pollution prevention incineration reusable plastic

IT Coal
Coke
RL: USES (Uses)
(ash- and hazardous material-free, powd., molded reusable calorific materials from thermoplastics and)

IT Extrusion apparatus for plastics and rubbers
Molding apparatus for plastics and rubbers
(carbonaceous compns. for processing by, for reusable and safely disposable products)

IT Electric conductors
Pigments
Stabilizing agents
(in molded reusable calorific materials from powd. carbon and thermoplastics, for toxic substance-free flue gas from incineration)

IT Recycling
(of molded products from polymers and powd. coal or coke)

IT Flue gases
(pollutant-free, from incineration of reusable molded products, additives for)

IT Waste solids
(recycled calorific molded products, compns. for, for energy efficient and safe disposal)

IT Fuels
(alternative, molded reusable products, from polymers and powd. coal or coke)

IT Coal
RL: USES (Uses)
(anthracite, ash- and sulfur-free, powd., molded reusable calorific materials from thermoplastics and)

IT Coke
RL: USES (Uses)
(petroleum, ash- and hazardous material-free, powd., molded reusable calorific materials from thermoplastics and)

IT Plastics
RL: USES (Uses)
(thermo-, molded reusable calorific materials from powd. carbon and)

IT 9002-88-4, **Polyethylene** 9003-07-0
RL: USES (Uses)

(**molded** reusable calorific materials from **powd.** carbon and)
RN 9002-88-4
RN 9003-07-0

L6 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1975:548341 CAPLUS
DN 83:148341
TI Heat-hardenable resin compositions
IN Bando, Satoshi; Yoshitake, Toshihiko
PA Kuraray Co., Ltd., Japan
SO Japan. Kokai, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC C08F
CC 36-3 (Plastics Manufacture and Processing)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50080383	A2	19750630	JP 1973-131061	19731120

PI JP 50080383 A2 19750630 JP 1973-131061 19731120
AB Unsatd. polyesters contg. 3-40 wt.% powders obtained by polymg. monomer mixts. of .alpha.,.beta.-unsatd. monomers and other radically polymerizable monomers (the monomer mixts. giving polymers swellable or dissolvable in the satd. polyesters and(or) crosslinking monomers contained in the unsatd. polyesters when they were polymd. in the presence of polyolefin powders) were mixed with thickeners to give stable compns. with good **pigment** dispersion and low molding shrinkage. Thus, maleic anhydride 73.5, phthalic anhydride 37.1, and propylene glycol 79.9 parts were condensed at 215.degree. to acid value 42 to give the polyester [25037-66-5], which was mixed (1:1) with styrene. Na dodecylbenzenesulfonate (1 part) was dissolved in 200 parts H2O mixed with **polyethylene powders** 40, Bz2O2 0.5, styrene 42, and acrylic acid 3 parts, heated 8 hr at 70.degree. in N, and dried 24 hr at 70.degree. in vacuo to give the modified polyethylene [9002-88-4] (2.5 wt.% acrylic acid) powders (98% 100 mesh). Further, 242 parts mixt. (95:5) of the above prepd. unsatd. polyester and the modified polyethylene was mixed with tert-butylcatechol 0.15, tert-butylperbenzoate 5, kaolin clay 145, talc 36, Zn stearate 45, a blue **pigment** paste 10, and MgO 2 parts, kneaded with 130 parts glass chopped strands, and pressed at 150.degree. at 200 kg/cm2 to give a uniformly colored specimen. No resin was deposited on the mold.
ST polyester **polyethylene molding** compn; acrylic acid **polyethylene molding**
IT Polyesters, preparation
RL: USES (Uses)
(acrylic acid-modified **polyethylene**-contg., for **molding powders**)
IT Ethene, homopolymer, acrylic acid-modified
RL: USES (Uses)
(unsatd. polyester molding compns. contg.)
IT 25037-66-5
RL: USES (Uses)
(acrylic acid-modified **polyethylene**-contg., for **molding powders**)
RN 25037-66-5

L6 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1976:46197 CAPLUS
DN 84:46197
TI Powder coloring agent compositions
IN Kita, Eizo; Kido, Nobuo; Isaki, Tetsuo

PA Konishi Pigment Mfg. Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC C08L
CC 42-5 (Coatings, Inks, and Related Products)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50123147	A2	19750927	JP 1974-30370	19740318

AB Powder coloring agent compns. with good dispersing properties, useful for coloring resins, were prepd. by mixing **pigments** with low mol. wt. polyolefin powders and inorg. fillers. Thus, a TiO2 [13463-67-7] fine **powder** 50, **polyethylene** [9002-88-4] **powder** (particle size 30 .mu., mol. wt. 720 > 5, and a CaCO3 [471-34-1] fine powder 45 parts were uniformly mixed and ground to give a white coloring agent powder, which was readily dispersed with a PVC resin to give a white molding material.
ST resin coloring agent **pigment**; polyolefin dispersing agent **pigment**
IT 13463-67-7, uses and miscellaneous
RL: USES (Uses)
(**pigments**, contg. calcium carbonate and **powd. polyethylene**, for **molded** plastics)
IT 471-34-1, uses and miscellaneous
RL: USES (Uses)
(**pigments**, contg. **powd. polyethylene** and titanium dioxide, for **molded** plastics)
IT 9002-88-4
RL: USES (Uses)
(powd., titanium dioxide **pigments** contg., for molded plastics)
RN 13463-67-7
RN 471-34-1
RN 9002-88-4

L6 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1972:127961 CAPLUS
DN 76:127961
TI Weathering of polyethylene films. 3
AU Nagasaka, Hideo; Kawamura, Kazuhiro
CS Fac. Eng., Ibaraki Univ., Hitachi, Japan
SO Ibaraki Daigaku Kogakubu Kenkyu Shuho (1970), 18, 49-60
CODEN: IDKSAB
DT Journal
LA Japanese
CC 36 (Plastics Manufacture and Processing)
AB **Polyethylene** [9002-88-4] film prepd. by melt-**molding** mech. or chem. **powd. polyethylene** (80-100 mesh) was degraded by exposure to outdoor light. The deterioration of the film was estd. by measuring the dielec. loss. The breakdown voltage of the film exposed to outdoor light for 45 months was 7.2-26.0 kV, and that of the film exposed to indoor light for 55 months was .geq. 28.3 kV. The deterioration of the film from chem. **powd. polyethylene** was faster than that of the film from mech. **powd. polyethylene**. The deterioration of the film contg. **pigments** was greater than that of the film contg. no **pigments**.
ST polyethylene film outdoor degrdn; dielec loss polyethylene film; breakdown voltage polyethylene film
IT 9002-88-4

RL: PROC (Process)
(weathering of, dielec. loss and strength in relation to)
RN 9002-88-4

L6 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1990:442256 CAPLUS
DN 113:42256
TI Phenolic resins filled with polyethylene and boric acid and/or anhydride
IN Honda, Toshiyuki
PA Matsushita Electric Works, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 2 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L061-06
ICS C08K003-04; C08K003-38
ICI C08L061-06, C08L023-00
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 37
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02069551	A2	19900308	JP 1988-221040	19880902

PI JP 02069551 A2 19900308 JP 1988-221040 19880902
AB Title resins with low dielec. loss at high frequencies are useful for microwave oven parts, etc. Thus, novolak phenolic resin 30, hexamine 4.5, H3BO3 5, **powd. polyethylene** 5, glass fibers 48, CaCO3 10, stearic acid 1, and **colorant** 1 part were mixed, kneaded, cooled, pulverized, and compression molded at 165.degree. for 2 min to give test pieces showing dielec. loss tangent (at 1 MHz) 0.008-0.009, and temp. after 10 min in a microwave oven 210.degree., vs. 0.02-0.03 and 280.degree. without the H3BO3 and polyethylene.
ST microwave oven part phenolic resin; boric acid contg phenolic resin; boron oxide contg phenolic resin; **polyethylene** filled phenolic resin **molding**
IT Ovens
(microwave, parts for, phenolic resins contg. boric acid and **powd. polyethylene** as, with low dielec. loss at high frequencies)
IT Phenolic resins, uses and miscellaneous
RL: USES (Uses)
(novolak, **moldings**, contg. boric acid and **powd. polyethylene**, with low dielec. loss at high frequencies)
IT 1303-86-2, Boric anhydride, uses and miscellaneous 10043-35-3, Boric acid (H3BO3), uses and miscellaneous
RL: USES (Uses)
(phenolic resins contg. **powd. polyethylene** and, with low dielec. loss at high frequencies)
IT 9002-88-4, **Polyethylene**
RL: USES (Uses)
(**powd.**, phenolic resins contg. boric acid and, with low dielec. loss at high frequencies)
IT 100-97-0D, contg. boric acid and **powd. polyethylene**
RL: USES (Uses)
(with low dielec. loss at high frequencies)
RN 1303-86-2
RN 10043-35-3
RN 9002-88-4
RN 100-97-0D

L6 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1975:480634 CAPLUS
DN 83:80634

TI Rotational molding of multilayered plastic bottles
IN Horiuchi, Yasuo; Katsube, Toraichi
PA Asahi Chemical Industry Co., Ltd., Japan
SO Japan. Kokai, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
NCL 25(5)F2
CC 37-2 (Plastics Fabrication and Uses)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50023464	A2	19750313	JP 1973-74741	19730704

AB A molding material for the outside layer and a molding material in a thermoplastic bag for the inside layer are heated in a rotational mold to give a bottle having a multilayered wall. Thus, 40 g **powd.** high-d. **polyethylene** (I) [9002-88-4] m. 130.degree. in a low-d. I bag m. 110.degree. and 60 g high d. I contg. red **pigments** were placed in an Al mold, biaxially rotated 10 min in an oven at 350.degree., and cooled 5 min with H2O to give a bottle having 1.5-mm red outside layer and 1.0-mm colorless inside layer. Similarly used were nylon 66 [32131-17-2] and DER 331 [25068-38-6].
ST **polyethylene** bottle rotational **molding**; multilayer bottle rotational molding; polyamide bottle rotational molding; epoxy resin bottle rotational molding
IT Bottles
(plastic, multilayered rotationally-molded)
IT Molding of plastics and rubbers
(rotational, of multilayered bottles)
IT 9002-88-4 32131-17-2
RL: USES (Uses)
(bottles, contg. colored and colorless layers, rotationally-molded)
IT 25068-38-6
RL: USES (Uses)
(polyethylene bottles contg. inside layers of, rotationally-molded)
RN 9002-88-4
RN 32131-17-2
RN 25068-38-6

L6 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1995:658183 CAPLUS
DN 124:31489
TI Aromatic vinyl polymer compositions for powder molding
IN Masuda, Toshio; Misono, Takeharu
PA Zeon Kasei Kk, Japan; Nippon Zeon Co
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L053-02
ICS C08L023-04
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 37
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07102151	A2	19950418	JP 1993-267976	19930930
JP 3004513	B2	20000131		

AB The title compns. with natural leather touch, short molding cycle, no melt flow or squeeze flow, useful for automobile interior materials, contain (A) 100 parts hydrogenated arom. vinyl compd.-diene compd. copolymers having 10,000-500,000 no.-av. mol. wt. and 10-50% arom. vinyl compds. and

(B) 5-60 parts ethylene polymers with 500-10,000 viscosity-av. mol. wt. Thus, hydrogenated 70:30 butadiene-styrene block copolymer (no.-av. mol. wt. 40,000) 100, ACPE-6 (low-d. polyethylene, viscosity-av. mol. wt. 2000) 25, pentaerythritol ester 5.0, hindered phenol antioxidant 0.2, hindered amine UV-absorber 0.3 and **pigments** 3.0 parts were melt-kneaded, pelletized, and crushed to obtain a compn. showing good melting property. The compn. was used to produce a sheet with no pinholes or squeeze flow.

ST powder molding hydrogenated butadiene styrene copolymer; leather substitute powder molding blend; **polyethylene** butadiene styrene copolymer **molding** blend

IT Plastics, molded
RL: POF (Polymer in formulation); USES (Uses)
(thermo-, blends of hydrogenated arom. vinyl-diene block copolymers and **polyethylene** for **powder molding**)

IT 24937-78-8, Evathlene 250
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
(blends of hydrogenated arom. vinyl-diene block copolymers and **polyethylene** for **powder molding**)

IT 9010-77-9, ACPE 629 70777-48-9, Hiwax 2203A 114471-08-8, Hiwax 4052E
RL: POF (Polymer in formulation); USES (Uses)
(blends of hydrogenated arom. vinyl-diene block copolymers and **polyethylene** for **powder molding**)

IT 9002-88-4, Polyethylene
RL: POF (Polymer in formulation); USES (Uses)
(hydrogenated butadiene-styrene block copolymer blends; blends of hydrogenated arom. vinyl-diene block copolymers and **polyethylene** for **powder molding**)

IT 106107-54-4D, Butadiene-styrene block copolymer, hydrogenated
RL: POF (Polymer in formulation); USES (Uses)
(polyethylene blends; blends of hydrogenated arom. vinyl-diene block copolymers and **polyethylene** for **powder molding**)

RN 24937-78-8
RN 9010-77-9
RN 70777-48-9
RN 114471-08-8
RN 9002-88-4
RN 106107-54-4D

L6 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1999:114000 CAPLUS
DN 130:223982
TI Molding materials for two-colored composite polyester moldings useful for food containers in airplanes
IN Tsugakoshi, Kazuomi; Onda, Yoshimi
PA Kyoyo Chemics K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM B29C039-12
ICS C08L067-00; B29K067-00; B29K105-06
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 17, 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11042656	A2	19990216	JP 1997-235329	19970728
	JP 2976336	B2	19991110		

AB The materials comprise (a) polyester BMC (bulk molding compd.) contg. curing agents which harden the resins on the high temp. side of upper mold

and leave the resins uncured on the low temp. side of the lower mold, where the temp. of the upper mold is higher than that of the lower mold, and (b) colored polyester compds. contg. curing agents which harden the resins on the low temp. side of the lower mold. Thus, BMC comprising unsatd. polyester 100, **polyethylene powder** 6, styrene 2, Al(OH)3 (filler) 200, TiO2 (**pigment**) 7, Zn stearate (release agent) 3, dicumyl peroxide (curing agent) 1, MgO 1.2, and chopped glass (reinforcement) 28 parts was fed into a cavity of a pair of molds and cured at 160-165.degree., added with a colored **molding** material comprising unsatd. polyester 100, **polyethylene powder** 6, styrene 2, Al(OH)3 200, **pigment** 5, Zn stearate 3, tert-butylperoxy benzoate (curing agent) 1, and MgO 1.2 part and cured at 140-145.degree. to give a two-colored composite product.

ST food container molded polyester two color; curing agent BMC polyester polyethylene blend; cumyl peroxide curing catalyst molding compd; butylperoxy benzoate curing catalyst molding compd

IT Molding of plastics and rubbers
(bulk; molding materials for two-colored composite polyester moldings useful for food containers in airplanes)

IT Containers
(food; molding materials for two-colored composite polyester moldings useful for food containers in airplanes)

IT Crosslinking agents
(molding materials for two-colored composite polyester moldings contg. 2 types of curing agents)

IT **Pigments**, nonbiological
(molding materials for two-colored composite polyester moldings useful for food containers in airplanes)

IT Molded plastics, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(molding materials for two-colored composite polyester moldings useful for food containers in airplanes)

IT Polyesters, uses
RL: FFD (Food or feed use); POF (Polymer in formulation); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(unsatd.; molding materials for two-colored composite polyester moldings useful for food containers in airplanes)

IT 80-43-3, Dicumyl peroxide 614-45-9, tert-Butylperoxy benzoate
RL: CAT (Catalyst use); USES (Uses)
(curing agent; molding materials for two-colored composite polyester moldings contg. 2 types of curing agents)

IT 9002-88-4, **Polyethylene**
RL: FFD (Food or feed use); POF (Polymer in formulation); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(**molding** materials for two-colored composite polyester moldings useful for food containers in airplanes)

IT 13463-67-7, Titania, uses
RL: MOA (Modifier or additive use); USES (Uses)
(**pigment**; molding materials for two-colored composite polyester moldings useful for food containers in airplanes)

RN 80-43-3
RN 614-45-9
RN 9002-88-4
RN 13463-67-7

L6 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1984:23438 CAPLUS
DN 100:23438
TI Rubber moldings with colored designs
PA Toyoda Gosei Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
IC B29H021-02; B29H003-00
ICA B29H009-10; B32B025-08
CC 39-9 (Synthetic Elastomers and Natural Rubber)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58102744	A2	19830618	JP 1981-202934	19811215

AB Rubber moldings having colored designs are prepd. by molding peroxide-vulcanizable rubber compns. in molds having designed cavities contg. compns. of **powd. polyethylene** [9002-88-4], **pigments**, peroxide, and paraffin wax (binders). Thus, a compn. of paraffin wax 100, Flothene UF 4 100, Permanent Yellow HR 5, and Di-Cup 40C 8 parts was placed in the designed cavity of a mold. A compn. of EP 3070 (ethylene-propene rubber) 100, ZnO 5, stearic acid 1, carbon black 40, powd. S 0.3, and Di-Cup 40C 6 parts was molded in the above mold at 170.degree. and 100 kg/cm2 for 10 min.

ST colored design rubber molding; ethylene propene rubber molding; polyethylene **pigment** wax compn

IT Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous
RL: USES (Uses)
(colored compns. contg., **powd. polyethylene**, for formation of designs on rubber moldings)

IT Molding of plastics and rubbers
(**molding** of EPR, with colored **polyethylene** design)

IT 9002-88-4
RL: USES (Uses)
(colored compns., contg. paraffin wax, for formation of designs on rubber moldings)

RN 9002-88-4

L6 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1954:48517 CAPLUS
DN 48:48517
OREF 48:8582f-h
TI Effect of ultrasound on thermoplastic melts
AU Bernhardt, Ernest C.
CS Tech. Hochschule, Darmstadt, Germany
SO Ind. Eng. Chem. (1954), 46, 742-6
DT Journal
LA Unavailable
CC 31 (Synthetic Resins and Plastics)

AB Standard **molding powder** grades of polystyrene, **polyethylene**, and polyvinyl chloride contg. 50% dioctyl phthalate were exposed to ultrasonic energy at the level of 3 watts per sq. cm., at frequencies of 350, 1000, and 3000 kc. The materials were exposed at their normal working temps. of 270, 250 and 200.degree., resp. Ultrasound had no depolymerizing effect on the melts and had no measurable permanent effect on the viscosity. Adsorption of ultrasonic energy caused a rapid rise in temp. in the melts, the temp. rise being dependent on the frequency. A frequency near 1000 kc. produced the greatest effect. Ultrasonic energy caused mol. orientation in a plane perpendicular to the direction of the sound waves. It was concluded that ultrasonic energy could be used to aid in homogenization and in the dispersion of **colorants** and fillers in thermoplastic melts.

L6 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1993:148818 CAPLUS
DN 118:148818
TI Nonplasticized poly(vinyl chloride)-polyethylene mixture with reduced plasticization time

IN Valicek, Michal; Pechac, Eligius; Pleva, Stefan; Hupka, Ladislav
PA Czech.
SO Czech., 4 pp.
CODEN: CZXXA9
DT Patent
LA Slovak
IC ICM C08L027-06
CC 37-6 (Plastics Manufacture and Processing)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CS 271535	B1	19901012	CS 1988-777	19880208

AB A compn. suitable for extrusion of drain tubes in conic 2-screw machines consists of PVC (K .gtoreq.62) 100, mixed Pb stabilizer 2.2-3.5, microground carbonates (.gtoreq.90% particles <20 .mu.m) and inorg. **pigments** 2-10, and **powd.** high-pressure branched **polyethylene** (I) 0.2-1.2 parts. Thus, a suspension was so prepd. with 0.4 phr I and plasticized in a Brabender plastograph at 180.degree. and 50 rpm within 34.1 .+-.1.9 min.
ST polyethylene plasticizer PVC
IT Pipes and Tubes
(PVC, contg. polyethylene, reduced plasticization in manuf. of)
IT Plastics, **molded**
RL: USES (Uses)
(PVC-**polyethylene** mixts, with reduced plasticization time)
IT Plasticizers
(polyethylene, for PVC)
IT 9002-88-4, Polyethylene
RL: USES (Uses)
(PVC contg., with reduced plasticization time)
IT 9002-86-2, Pvc
RL: USES (Uses)
(mixt. with polyethylene, with reduced plasticization time)
RN 9002-88-4
RN 9002-86-2

L6 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2002 ACS
AN 1975:607162 CAPLUS
DN 83:207162
TI Unsaturated polyester compositions
IN Ogino, Akira; Yamada, Minoru; Minato, Ichiro
PA Takeda Chemical Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC C08F; C08L; B29D
CC 36-6 (Plastics Manufacture and Processing)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 50097685	A2	19750802	JP 1974-1172	19731227
JP 58044690	B4	19831005		

AB Unsatd. polyesters were mixed with copolymers prepd. from CH2:CHO2CR (R = C1-6 alkyl), maleic, fumaric, acrylic, and(or) methacrylic acid, and vinyl chloride, which were sol. in CH2:CHO2R, and polyolefin powder. For example, 60 parts of a 66:34 mixt. of unsatd. polyester (acid no. 31 and 156 mol. wt.) and styrene were mixed with 40 parts of 33% styrene soln. of 69:30:1 vinyl chloride-vinyl acetate-maleic acid copolymer [9005-09-8] and 5 parts **polyethylene** [9002-88-4] **powder**, mixed with tert-Bu perbenzoate 1, a red **pigment** paste 10, CaCO3 150, Zn stearate 3, and MgO 4 parts, kneaded with 15 wt.% (based on the total) of

chopped glass fibers (0.25 in. length), and kept at 145.degree. and 80 kg/cm2 in a metal mold to give uniformly colored luster-rich article.

ST polyester compn polyethylene; vinyl maleic polymer compn

IT Plastics, reinforced
RL: USES (Uses)
(glass fiber-, polyethylene-unsatd. polyester-vinyl polymer blends)

IT Polyesters, uses and miscellaneous
RL: USES (Uses)
(unsatd., glass-fiber-reinforced, **molding** compns., contg. **polyethylene** and vinyl chloride copolymers)

IT 9005-09-8
RL: USES (Uses)
(unsatd. polyester **molding** compns. contg. **polyethylene** and, glass fiber-reinforced)

IT 9002-88-4
RL: USES (Uses)
(unsatd. polyester molding compns. contg. vinyl chloride-vinyl acetate-maleic acid polymer and, glass fiber-reinforced)

RN 9005-09-8

RN 9002-88-4

=>